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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/616,874	07/10/2003	Markus Hammer	624-031331	1559
28289	7590	01/25/2006	EXAMINER	
THE WEBB LAW FIRM, P.C. 700 KOPPERS BUILDING 436 SEVENTH AVENUE PITTSBURGH, PA 15219			HWANG, VICTOR KENNY	
			ART UNIT	PAPER NUMBER
			3764	

DATE MAILED: 01/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/616,874	Applicant(s) HAMMER, MARKUS	
	Examiner Victor K. Hwang	Art Unit 3764	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, each of the disc-shaped wheels being noncircular (claim 11) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. Note, that the term “ellipsoid” in claim 12 generally is defined to include shapes that are circular and shapes that are elliptical.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by *Webber* (US Pat. 6,090,020). *Webber* discloses an exercising device comprising at least one moveable actuating grip 12 adapted to be actuated by a user for exercise, a counteracting force generating member 114 to act upon the actuating grip with a counteracting force, and a tensing member 72, 194, 195 and a power ratio varying member 190 that connect the actuating grip 12 and the counteracting force generating member 114 relative to each other, wherein the power ratio varying member 190 is a drive wheel unit which includes at least two disc shaped wheels 191, 192 that have different diameters, that are coaxially coupled to each other, and that are non-rotatable relative to each other. The tensing member 194, 195 are engaged to selected ones of the disc-shaped wheels 191, 192 by coupling units. The drive wheel unit is configured such that the disc-shaped wheels 191, 192 are alignable in sequence.

4. Claims 1 and 7-10 are rejected under 35 U.S.C. 102(b) as being anticipated by *Fuller, Sr.* (US Pat. 5,637,063). *Fuller, Sr.* discloses an exercising device comprising at least one moveable actuating grip 34 adapted to be actuated by a user for exercise, a counteracting force generating member 25 to act upon the actuating grip with a counteracting force, and a tensing member 52, 53 and a power ratio varying member that connect the actuating grip 34 and the counteracting

force generating member 25 relative to each other, wherein the power ratio varying member is a drive wheel unit which includes at least two disc shaped wheels 50, 51 that have different diameters, that are coaxially coupled to each other, and that are non-rotatable relative to each other. The tensing member 52, 53 are engaged to selected ones of the disc-shaped wheels 50, 51 by coupling units. The drive wheel unit is configured such that the disc-shaped wheels 50, 51 are alignable in sequence. The drive wheel unit includes three disc-shaped wheels 50, 51.

With regard to claims 9 and 10, the disc-shaped wheels 50, 51 are exchangeable with one another, with the two outer ones 51 of the disc-shaped wheels exchangeable with each other. The claim language of claims 9 and 10 does not require that the disc-shaped wheels actually be configured to permit convenient or simply exchange with one another, merely that they are exchangeable with each other. Therefore, as broadly interpreted, the disc-shaped wheels 50, 51 satisfy the claimed limitation.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-4 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Webber* (US Pat. 6,090,020) in view of *Parviainen* (US Pat. 4,911,431). *Webber* has been discussed above, and such discussion is incorporated herein. *Webber* discloses the invention as claimed except for the coupling unit configured so as to be quick-releasable (claim 2); the coupling unit

being form-locking (claim 3); the coupling unit including a plug disposed on one end of the tensing member, and an undercut cavity which is disposed in a circumferential side of the selected one of the disc-shaped wheels, and a transverse channel which permits external access to the under cut cavity (claim 4).

Parviainen a power ratio varying member for an exercise device comprising a disc-shaped wheel 1 coupled to a tensing member. The disc-shaped wheel has an undercut cavity 28 disposed in a circumferential side and a transverse channel 27 which permits external access to the undercut cavity 28. The cavity 28 receives a thickened end of the tensing member to anchor the end of the tensing member relative to the disc-shaped wheel.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the disc-shaped wheels and tensing member of *Webber* with the coupling means of *Parviainen*, in order to secure an end of the tensing device to a selected disc-shaped wheel, since *Parviainen* discloses a known and equivalent means for securing an end of a cable to a rotatable wheel wherein the cable will be operationally supported about the periphery of the wheel.

7. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Webber* (US Pat. 6,090,020) in view of *Parviainen* (US Pat. 4,911,431) as applied to claim 4 above, and further in view of *Schleffendorf* (US Pat. 4,515,363). *Webber* in view of *Parviainen* discloses the invention as claimed except for the thickened plug end of the cable being cylindrical.

Schleffendorf discloses a cable plug end 57 having a cylindrical shape (Figs. 10 and 11). The cylindrical shape of the plug is common of ferrules used to crimp the ends of cables to provide an anchor point.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the thickened plug end of the cable of *Webber* in view of *Parviainen* with the cylindrical plug of *Schleffendorf*, since *Schleffendorf* discloses such a plug end and since cylindrical ferrules are commonly used to provide an anchor point on a cable.

8. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Webber* (US Pat. 6,090,020) in view of *Mawer* (US Pat. 5,335,883). *Webber* has been discussed above, and such discussion is incorporated herein. *Webber* discloses the invention as claimed except for the coupling unit configured so as to be quick-releasable (claim 2); the coupling unit being form-locking (claim 3); the coupling unit including a plug disposed on one end of the tensing member, and an undercut cavity which is disposed in a circumferential side of the selected one of the disc-shaped wheels, and a transverse channel which permits external access to the under cut cavity (claim 4); and wherein the cavity has an entry region which is communicated with the transverse channel, and a securing region which is closed at one side thereof, and which is communicated with the entry region in a circumferential direction (**claim 6**).

Mawer discloses a known coupling unit for coupling a cable tensing member to a rotatable wheel upon which the cable is supported. The coupling unit comprises an undercut cavity disposed in a circumferential side of wheel 23, the undercut cavity receiving the enlarged terminal end of a cable 24. A transverse channel 41 permits external access to the undercut

cavity. The cavity has an entry region 40 which is communicated with the transverse channel 41, and a securing region 44 which is closed at one side thereof, and which is communicated with the entry region in a circumferential direction.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the tensing member and disc-shaped wheels of *Webber* with the coupling means of *Mawer*, since the coupling unit of *Mawer* is a known equivalent for securing a terminal end of a cable to a rotatable wheel having a surface supporting the length of the cable.

9. Claims 1 and 7-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Fuller, Sr.* (US Pat. 5,637,063) in view of *Christolear, Jr.* (US Pat. 4,957,281). *Fuller, Sr.* has been discussed above, and such discussion is incorporated herein. *Fuller, Sr.* discloses the invention as claimed except for the disc-shaped wheels being non-circular (claim 11); and ellipsoid (claim 12).

Christolear, Jr. discloses an exercise device comprising disc-shaped wheels 20 for varying the force applied to a user-actuated grip 54. The disc-shaped wheels are ellipsoid in shape, including non-circular shapes and have a peripheral contour designed to provide a progressive resistance to a user performing a given exercise. The disc-shaped wheels are replaceable with other disc-shaped wheels have other peripheral contours to provide a selected resistance profile.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the disc-shaped wheels of *Fuller, Sr.* with ellipsoid and non-

circular peripheral contours, since *Christolear, Jr.* teaches that the peripheral contours are selected to provide a specifically designed resistance profile to a user during exercise.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Anthony (US Pat. 1,555,544), *Schacht, Jr.* (US Pat. 2,855,162) and *Murray* (US Pat. 3,582,011) disclose various cable coupling units.

Lambert, Jr. et al. (US Pat. 4,311,305), *Baldwin* (US Pat. 4,478,411) and *Sollenberger* (US Pat. 5,135,453) disclose various power ratio varying drive wheel units.

Daniels (US Pat. 6,027,429) discloses a drive wheel unit having multiple wheels (at least Figs. 7 and 8) selectively engaged to provide selective power ratios.

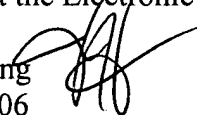
11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor K. Hwang whose telephone number is (571) 272-4976. The examiner can normally be reached Monday through Friday from 7:30 AM to 4:00 PM Eastern time.

The facsimile number for submitting papers directly to the examiner for informal correspondence is (571) 273-4976. The facsimile number for submitting all formal correspondence is (571) 273-8300.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory L. Huson can be reached on (571) 272-4887.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Victor K. Hwang
January 18, 2006



Stephen K. Cronin
Primary Examiner